REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. § 1.111, and in light of the remarks which follow, are respectfully requested.

By the present amendment, claims 37 and 53 have been amended to recite a non-therapeutic method of identifying persons having sensitive skin to a capsaicinoid and that the method comprises applying to a skin area of an adult individual .... These amendments are supported by the specification, particularly, paragraph [0113]. Further, claims 43 and 44 have been amended to further improve their clarity. Claims 68-95 have been added, which substantially correspond to previously canceled claims 1-9, 12, 16-19, 22-25 and 27-36, respectively, and are further supported by the specification, particularly, paragraph [0113]. Claims 1-36 and 55-63 were previously canceled.

No new matter has been added. Upon entry of the Amendment, claims 37-54 and 64-95 will be all the claims pending in the application.

I. Response to Claim Objection

Claims 43 and 44 were objected to for informalities.

In response, claims 43 and 44 have been amended to correct the typographical error, by replacing "a)" with --1)--. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the objection.

II. Response to Rejection under 35 U.S.C. § 103(a)

Claims 37, 38, 41, 42 and 47-54 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Robinson et al., *Contact Dermatitis*, "Evaluation of a quantitative clinical

method for assessment of sensory skin irritation," 45:205-213, 2001. Applicants respectfully traverse the rejection for the reasons of record and the following additional reasons.

Independent claims 37 and 53 recite a non-therapeutic method of identifying persons having sensitive skin to a capsaicinoid, comprising, *inter alia,* applying to a skin area of an adult individual an aqueous or aqueous-alcoholic solution, comprising a stimulant that is a capsaicinoid or a mustard oil at a concentration of between 1×10^{-6}% and 5×10^{-4}%.

Robinson et al. describes studies related to response of individual subjects to a topical application of chemosensory irritant chemicals using the labeled magnitude (LM) scale, for pre-market dermatotoxicologic safety testing and risk assessment (page 211, paragraph bridging left and right column).

The capsaicin treatment studies in Robinson et al. were performed by using capsaicin in 80% ethanol at concentrations of 100 to 10,000 μM (page 206, right column, first paragraph), which is 3.12×10^{-3}% to 3.12×10^{-1}% by weight, as shown in the following calculation:

{[100×10^{-6}mole / 10^3 ml (100 μM)] x 305.42 g / mole [(molecular weight of capsaicin)] ÷ [0.98 g / ml (density of solution)]} x 100% = 3.12×10^{-3}% by weight; and

{[$10{,}000 \times 10^{-6}$mole / 10^3 ml (100 μM)] x 305.42 g / mole [(molecular weight of capsaicin)] ÷ [0.98 g / ml (density of solution)]} x 100% = 3.12×10^{-1}% by weight

This range of capsaicin concentrations described in Robinson et al. is outside the range of 1×10^{-6}% to 5×10^{-4}% recited in present claims 37 and 53.

Robinson et al. further states that "the results of the capsaicin study showed some degree of correlation between self-perceived 'reactivity' to recall/imagined skin stimuli and actual measured chemosensory responses" (page 210, right column, third paragraph; page 212, right column, first paragraph). One of ordinary skill in the art would understand that the

results described in Robinson et al. were obtained by using capsaicin solutions at concentrations of 100 to 10,000 μM in 80% ethanol.

There is no indication or suggestion in Robinson et al. that application of capsaicin solutions at concentrations lower than 100 μM would provide predictable results in providing the desired information. Therefore, one of ordinary skill in the art would have had insufficient motivation to modify Robinson et al. by lowering the concentration of the capsaicin solutions to below 100 μM (corresponding to 3.12×10^{-3}% by weight). For at least these reasons, Robinson et al. does not disclose or suggest the subject matter recited in claims 37 and 53.

Furthermore, Robinson et al. does not disclose or suggest that use of ethanol with concentration different from 80% would provide predictable results in providing the desired information. Therefore, one of ordinary skill in the art would have had insufficient motivation to modify Robinson et al. by replacing 80% ethanol with ethanol having concentration different from 80%, e.g., 1% to 50%, 5% to 20%, 8% to 15%, and 10%, recited in present claims 48-51.

Additionally, claims 38, 41-44, 47-52 and 54 depend from claim 37 or 53.

In view of the foregoing, Applicants respectfully submit that the present claims are patentable over Robinson et al., and thus the rejection should be withdrawn.

III. Response to Rejections under 35 U.S.C. § 112

a. Claims 43 and 44 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Applicants respectfully submit that claims 43 and 44 as amended are not indefinite.

Specifically, claims 43 and 44 have been amended to recite that step 1) comprises between 1 and 3 applications, and 3 applications, respectively, of the aqueous or aqueous-alcoholic solution to the skin area of the individual. It is clear that when multiple applications are used, all the applications are applied to the same skin area location successively. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

b. Claims 37, 38, 41-44 and 47-54 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement. Applicants respectfully submit that the claims as amended are in compliance with § 112, first paragraph requirements.

Specifically, in the Amendment, independent claims 37 and 53 have been amended to recite a non-therapeutic method of identifying persons having sensitive skin to a capsaicinoid and that the method comprises applying to a skin area of an adult individual ...., as suggested by the Examiner. Claims 38, 41-44 and 47-54 depend from claim 37 or 54, directly or indirectly. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

IV. New claims

Newly added claims 68-95 are directed to a method of evaluating the level of skin neurosensitivity of an adult individual to a capsaicinoid. Independent claims 68, 70, 78, 87 and 92 recite, *inter alia*, applying to a skin area of the individual a composition comprising a physiologically acceptable vehicle that is an aqueous or aqueous-alcoholic solution and a peripheral nervous system stimulant that is a capsaicinoid or a mustard oil, the concentration of the stimulant being between $1 \times 10^{-6}\%$ and $5 \times 10^{-4}\%$ (or $1 \times 10^{-4}\%$) by weight relative to the total weight of the composition.

As discussed above, the capsaicin treatment studies in Robinson et al. were performed by using capsaicin in 80% ethanol at concentrations of 100 to 10,000 μM, which is 3.12×10^{-3}% to 3.12×10^{-1}% by weight, and outside the range of 1×10^{-6}% to 5×10^{-4}% (or 1×10^{-4}%) recited in present claims 68, 70, 78, 87 and 92. Moreover, there is no indication or suggestion in Robinson et al. that application of capsaicin solutions at concentrations lower than 100 μM would provide predictable results in providing the desired information. Therefore, one of ordinary skill in the art would have had insufficient motivation to modify Robinson et al. by lowering the concentration of the capsaicin solutions to below 100 μM (corresponding to 3.12×10^{-3}% by weight). As such, Robinson et al. does not disclose or suggest the subject matter recited in present claims 68, 70, 78, 87 and 92.

Furthermore, Robinson et al. does not disclose or suggest that use of ethanol with concentration different from 80% would provide predictable results in providing the desired information. Therefore, one of ordinary skill in the art would have had insufficient motivation to modify Robinson et al. by replacing 80% ethanol with ethanol having concentration different from 80%, e.g., less than 50%, 1% to 50%, 5% to 20%, 8% to 15%, and 10%, recited in present claims 77 and 82-85.

Additionally, claims 69, 71-77, 79-86, 88-91 and 93-95 depend from claim 68, 70, 78, 87 or 92.

In view of the foregoing, Applicants respectfully submit that new claims 68-95 are patentable over Robinson et al.

V. Conclusion

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any

questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (202) 452-7932 at his earliest convenience.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 10, 2008 By: _____

Fang Liu, Ph.D.
Registration No. 51,283